

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Cancelled).

2. (Currently Amended) A rotation control circuit of a motor, comprising:

a PWM control circuit of the ~~said~~ motor;

a rotational speed sensor of the ~~said~~ motor;

a reference signal generation circuit;

a phase comparing circuit;

a divider for dividing the detected rotational speed signal of the ~~said~~ motor; and

a rotation command means of the ~~said~~ motor;

wherein the phase difference between the signal from the ~~said~~ divider and the signal based on the ~~said~~ reference signal is sought with the ~~said~~ phase comparing unit, and this phase difference signal is supplied to the ~~said~~ PWM control circuit; and

wherein the ~~said~~ command means alters the division ratio of the ~~said~~ divider in accordance with the contents of the rotational speed alteration request to the ~~said~~ motor.

3. (Currently Amended) A driver comprising the rotation control circuit of a motor according to claim 2, wherein the ~~said~~ driver employs the motor controlled with the ~~said~~ control circuit as a drive source of a drive mechanism.

4-6. (Cancelled)

7. (Currently Amended) A vehicle having a vehicle body, a drive wheel, an auxiliary wheel, and a first drive source and in which the ~~said~~ first drive source rotates the ~~said~~ drive wheel to make the ~~said~~ vehicle run, comprising:

a position sensor of the ~~said~~ vehicle body which outputs a frequency signal as a detection signal;

drive control means of the ~~said~~ vehicle body; and

posture control means of the ~~said~~ vehicle body which has a second drive source for moving the position of the ~~said~~ drive wheel in relation to the vehicle body, a third drive source for making the ~~said~~ auxiliary wheel float from the road surface, and a control circuit for controlling the ~~said~~ second drive source in accordance with the frequency signal from the ~~said~~ position sensor and the ~~said~~ drive control means;

wherein the ~~said~~ control circuit has a reference signal generation circuit, a phase comparing circuit, a divider for dividing the ~~said~~ frequency signal, and a PWM control circuit, the ~~said~~ phase difference between the signal from the ~~said~~ divider and the signal based on the ~~said~~ reference signal is compared with said phase comparing unit, this phase difference signal is supplied to the ~~said~~ PWM control circuit, and the output of the ~~said~~ PWM control circuit is supplied to the ~~said~~ second drive source.

8. (Currently Amended) A vehicle according to claim 7, wherein the said first and second drive sources are electric motors.

9. (Currently Amended) A vehicle according to claim 7, wherein the said position sensor is a distance sensor of the said vehicle body and road surface, or an inclination sensor for detecting the inclination of the said vehicle body.

10-11. (Cancelled)

12. (Currently Amended) A driver comprising the rotation control circuit of a motor according to claim 2, wherein the said driver employs the motor controlled with the said control circuit as a drive source of a drive mechanism.

13-19. (Cancelled)

20. (Currently Amended) A vehicle according to claim 7, wherein the said detection signal is a distance signal for indicating the distance of the said vehicle body and road surface, or an inclination signal for indicating the inclination of the said vehicle body.